



# IECEX Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: **IECEX BAS 21.0046X** Page 1 of 3 [Certificate history:](#)  
Status: **Current** Issue No: 0  
Date of Issue: 2021-12-03  
Applicant: **SANYATA ACTUATION AND FLUID ENGINEERING PRIVATE LIMITED**  
No-262/1-A Mettukuppam Road  
Via Alapakkam Road,  
Janaki Nagar,  
Maduravoyal,  
Chennai, 600095  
**India**  
Equipment: **Limit switch box Type SB-EX--X-X-XXXX-X-X-X**  
Optional accessory:  
Type of Protection: **Flameproof**  
Marking: **Ex db IIC T6 Gb (-20°C ≤ Ta ≤ +55°C) or**  
**Ex db IIC T5 Gb (-20°C ≤ Ta ≤ +70°C) or**  
**Ex db IIC T4 Gb (-20°C ≤ Ta ≤ +80°C)**

Approved for issue on behalf of the IECEx  
Certification Body:

**Mr R S Sinclair**

Position:

**Technical Manager**

Signature:  
(for printed version)

Date:

3/12/2021

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting [www.iecex.com](http://www.iecex.com) or use of this QR Code.



Certificate issued by:

**SGS Baseefa Limited**  
**Rockhead Business Park**  
**Staden Lane**  
**Buxton, Derbyshire, SK17 9RZ**  
**United Kingdom**





# IECEX Certificate of Conformity

Certificate No.: **IECEX BAS 21.0046X**

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Date of issue: 2021-12-03

Issue No: 0

Manufacturer: **SANYATA ACTUATION AND FLUID ENGINEERING PRIVATE LIMITED**  
No-262/1-A Mettukuppam Road  
Via Alapakkam Road,  
Janaki Nagar,  
Maduravoyal,  
Chennai, 600095  
**India**

Additional  
manufacturing  
locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

#### STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

[IEC 60079-0:2017](#) Explosive atmospheres - Part 0: Equipment - General requirements  
Edition:7.0

[IEC 60079-1:2014-06](#) Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"  
Edition:7.0

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

#### TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

[GB/BAS/ExTR21.0160/00](#)

Quality Assessment Report:

[IN/KLCS/QAR21.0005/00](#)



# IECEX Certificate of Conformity

Certificate No.: **IECEX BAS 21.0046X**

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Date of issue: 2021-12-03

Issue No: 0

## **EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

The Limit switch box, Model: SB-EX--X-X-XXXX-X-X-X consists of a housing, cover, and top & bottom operating rods. The housing & cover are constructed from aluminium alloy grade LM24; with alternative materials of construction being aluminium alloy grade LM25 and stainless steel grade 316/CF8M. The top & bottom operating rods are constructed from stainless steel grade 304 with an alternative material of construction being stainless steel grade 316.

For more information see Annex.

## **SPECIFIC CONDITIONS OF USE: YES as shown below:**

1. The manufacturer has maintained larger lengths, more stringent gaps, and a greater number of thread engagement for the flameproof joints than required by the standard. The user must refer to the manufacturer before carrying out any repair or refurbishment to the equipment.
2. The fastening screws for housing and cover with spigot joint shall be of stainless-steel socket head cap screw of size M8 x 30, property class A2-70 with minimum yield stress of 450 MPa.
3. Care should be taken during installation and cleaning to avoid risk of ignition due to electro-static discharge. Cleaning of non-metallic surface must be done with a damp cloth

## **Annex:**

[IECEX BAS 21.0046X - Annex .pdf](#)

The Limit switch box, Model: SB-EX--X-X-XXXX-X-X-X consists of a housing, cover, and top & bottom operating rods. The housing & cover are constructed from aluminium alloy grade LM24; with alternative materials of construction being aluminium alloy grade LM25 and stainless steel grade 316/CF8M. The top & bottom operating rods are constructed from stainless steel grade 304 with an alternative material of construction being stainless steel grade 316.

An indicator dome made of polycarbonate is provided to indicate the position of the switch on top of the cover. The housing & cover forms a spigot joint; the housing and top operating rod forms a cylindrical joint, and the cover and bottom operating rod forms a cylindrical joint. The cover is secured on the housing via 4 M8 x 30 stainless steel socket head cap screws.

2 Nitrile O-rings are provided: one between the housing and cover, the other between the bottom operating rod and enclosure housing. The O-rings are provided for IP68 (For IPX8: 2 meter & 48 hours).

	SB-	EX	X	X	XXXX	X	X	X
<b>Series Type</b> WP - Weather Proof EX - Explosion Proof								
<b>Material of Construction</b> A: Aluminium S: Stainless Steel								
<b>Feedback Option</b> A. Basic Switch Feedback B. 4-20mA PTR C. 4-20mA PTR + Switches D. 4-20mA PTR with HART E. Modbus F. Profibus G. Foundation Field Bus X: Other communication protocols								
<b>Switch Code</b> Select from switch options table								
<b>No. of Switches</b> 1 2 3 4								
<b>Cable Entries</b> 1: 2 Cable Entries 1/2" NPT 2: 2 Cable Entries M20 x 1.5 3: 2 Cable Entries 3/4" NPT 4: 2 Cable Entries M25 x 1.5								
<b>Temperature</b> S: Standard L: Low H: High								